R E P O R T R E S U M E S

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SOMETHING CAN BE DONE--BOSTON DOES IT.
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BOSTON PUBLIC SCHOOLS, MASS.

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DESCRIPTORS- *DISADVANTAGED YOUTH, *SPECIAL PROGRAMS, *READING ACHIEVEMENT, *BASIC READING, *AUDITORY TRAINING, STATISTICAL DATA, TEST RESULTS, TABLES (DATA), COMPENSATORY EDUCATION PROGRAMS, MIGRANT YOUTH, PHONETICS, ELEMENTARY SCHOOL CHILDREN, BOSTON, MASSACHUSETTS, GATES PRIMARY READING TEST

SPECIAL PROGRAMS FOR CULTURALLY DIFFERENT AND DISADVANTAGED CHILDREN IN THE BOSTON PUBLIC SCHOOLS ARE DISCUSSED. SPECIAL EMPHASIS IS GIVEN TO THE BASAL READING PROGRAM IN WHICH ELEMENTARY SCHOOL CHILDREN WITH DISADVANTAGED BACKGROUNDS, HIGH MOBILITY, AND LOW ASPIRATIONS HAVE BEEN TAUGHT TO READ AT OR ABOVE GRADE LEVELS. IN THIS PROGRAM CHILDREN ARE GIVEN AUDITORY TRAINING IN HEARING VOWEL AND CONSONANT SOUNDS BEFORE LEARNING SIGHT WORDS FOR A READING VOCABULARY. SILENT AND ORAL READING SKILLS ARE CORRELATED, AND ALL ASPECTS OF COMPREHENSION ARE EMPHASIZED. SCORES ON THE GATES PRIMARY READING TEST SHOWED "SPECTACULAR" RESULTS. THE PROGRAM IS NOW USED IN ALL CITY SCHOOLS. THE READING TEST SCORES ARE PRESENTED IN TABLES. (AF)

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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Something can be done

Foreword

We express our thanks to the teachers, supervisors, and administrators of the Boston Public Schools, who furnished the data upon which this report is based, and without whose co-operation such a report would have been impossible.

We salute the individual educators whose courage and dedication have sustained them in the face of complex circumstances challenging their efforts.

THE ECONOMY COMPANY

BOSTON

. . . the nation's 13th largest city in size, is by tradition a city which places importance on the education of its children. One of the first actions of the original British and French settlers after they had provided places of shelter and worship was to appropriate funds for the education of their children. Thus, in 1635, five years after the city was founded, the first public school in America, the Boston Latin School, was established. During succeeding years other public schools were built to meet the educational needs of the rapidly growing community.

Boston's traditional emphasis on providing a good education for all of its children has been complicated by the repeated waves of immigration which have characterized the city's history. The economic, political, and religious upheavals in the Old World resulted in heavy immigration in the years prior to World War I. As Irish, Italian, and German immigrants arrived in Boston, they crowded into the core city and forced those already residing there to seek new homes in less congested areas. Since World War II, ever-increasing numbers of newcomers have been moving to Boston as the result of upheaval in the rural South.

Major concentration of these new immigrants has been in crowded and deteriorating neighborhoods of the core city, no longer desirable as residential areas but the only areas within the economic reach of the incoming family groups.

The 1960 census shows 27,000 Boston families living on an income of $3,000 or less, many of them in-migrants who, because they lack salable skills, must live in housing supported by public assistance. It is significant that 17 per cent of the total Boston student population lives in public housing, largest such percentage among the nation's Great Cities.

The response of the teachers and administration of the Boston Public Schools in the face of heightened problems is and has been an active and purposeful striving for solutions. This is contrasted to the feeling prevalent among some educators in other metropolitan areas that the problems are too big and cannot be solved because of their very size.

Like the dwellings of the core city, Boston's schools were of an earlier era, built to serve fewer children and to house very simple educational materials. The older schools could scarcely compete with the modern ones. However, the dedication and expertise of the skillful educators who have remained at their posts more than compensate for building deficiencies. Realizing that the future of the American democratic ideal lies in their hands, devoted teachers remain in their positions in the most difficult schools in the city despite inherent difficulties of their work.

The Boston Public Schools has undertaken a long-range building program. The major thrust in new construction, with major innovation, is in sections of

the city where heaviest population increase has occurred. Twelve new schools and 10 additions are included in this program, at a total investment of over $18 million.

Children attending Boston Public Schools manifest all of the many differences, abilities, and attitudes to be found in any metropolis. The economic status of the family, the culture in the home, and the security provided by the family are contributing factors to these variations. Children from economically disadvantaged homes often fail to bring to the school the experiential background and training that are the natural heritage of children from more favorable homes. Thus, they arrive at school poorly prepared to succeed in a school program geared to the middle-class child. In order to assist these children in the task of acculturation, the educators have had to tailor programs which give promise of success to children whose self-image and background need enhancing. To give each child a taste of success, new programs provide opportunity for mastery at each level of difficulty and offer one solution to the problem of helping disadvantaged children into the main stream of general American culture.

Among the programs aimed at providing solutions to the problem of helping disadvantaged children is the compensatory program of Boston Public Schools. Blueprint for this program was Counterpoise, piloted in 1963 and expanded in 1964. The Department of Compensatory Services was established in 1965. Its program is based on the assumptions that all children are entitled to as good an education as possible and that the educational program should be expanded in terms of classroom time.

Under the Boston compensatory program, the school day is expanded to include an after-school program, and the school year is extended to include a summer program. An early admissions program provides for Kindergartens I and II, including four-and five-year-old children.

Counterpoise schools moved toward a non-graded primary organization through addition of junior grades between Kindergarten and Grade 1, and between Grades 3 and 4.

An additional teacher has been assigned to each teaching team, and class size has been reduced to 25. Classrooms have been saturated with new books, programed materials, and visual equipment. Enrichment and remediation programs have been adopted.

There are 56 elementary school districts and 162 school buildings serving more than 45,000 Boston elementary school children. Each school district is serviced by a large main building and several smaller buildings. The schools are located so that young children do not have to cross heavily traveled roads to reach school. The main building is administered by a principal and one or more assistant principals. The pupil population determines the number of assistants.

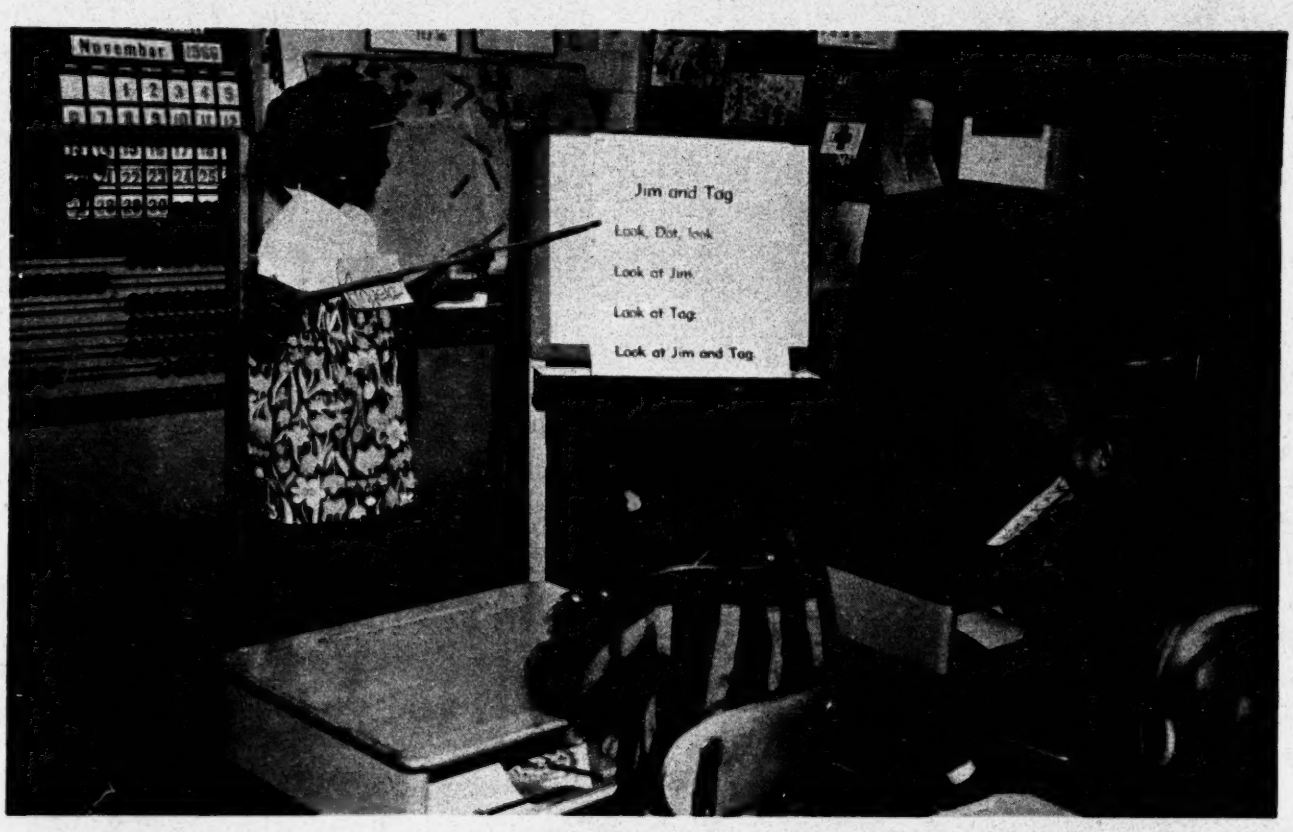
All districts must use an authorized list for the purchase of books. This book list is compiled under the direction of the Department of Elementary Supervision and offers a rich selection of educational materials and texts to meet the varied educational needs of Boston children. The principals of the districts may choose any books from this list for use in their districts.

In the culturally different schools, particular stress has been given to reading and mathematics. A strong phonetic approach to the teaching of reading

through the use of *Phonetic Keys to Reading* was adopted for all Grade 1 children and was expanded to include Grades 2 and 3 as these children moved through the grades. *Phonetic Keys to Reading* and *Keys to Independence in Reading* are the only series on the authorized list which are required for use in all Boston school districts. In the middle grades, cross-grouping in reading and mathematics was arranged by some master teachers in order to adapt the program to the needs of the individual pupil. At all levels small-group and/or individual instruction was given to pupils who evidenced this need.

Purposeful assemblies, field trips, and cross-districting help extend the horizons and enrich the background of the students. Cross-districting is an innovative practice in which each school in the compensatory group is paired with a school in a more advantaged section of the city. Teachers of both schools combine resources to design programs in various areas of the curriculum, which are carried on alternately in the two schools involved. Parents are encouraged to attend field trips and to visit assemblies and classrooms.

In addition to providing a highly specialized program for remediation and enrichment for culturally different children, the Boston Public Schools carries on a wide variety of educational programs in order to render top quality service to all of the children in the city. The Horace Mann School for the Deaf was founded in 1869. Visual Resources Service has been in operation since 1913. The Department of Speech and Lip Reading is active at every instructional level. A program of instruction is provided for children who



Pupils are taught to read with expression by grouping words in thought units and phrases.

are confined to home or to a hospital by prolonged illness. Some 2,400 children who have difficulty following the course of study for average learners are educated in special class work and wherever possible are returned to their regular grades. In every one of these special service departments, the staff maintains close contact with personnel of other specialized service departments, with the children's parents, and with principals and teachers.

In 1903 the Boston Public Schools opened its doors to the adult population during evening hours. Presently there are over 5,000 students enrolled in 23 schools and evening centers, studying a curriculum of 85 courses ranging from woodworking to algebra.

Four Adult Basic Education centers, teaching reading, writing, and computational skills, are providing new opportunities to some 400 interested adults in the city of Boston. Classes move at a pace geared to the learning capacities of the students, with classroom schedules which allow for individualized instruction at all times. The more advanced students are taught American history and heritage; national, state, and local government; health; safety; science; manners; values; and wise use of leisure time. The average age of students is 37. Last spring 123 adults earned their elementary certificates and became eligible to enroll in one of Boston's evening high schools.

For the gifted high school student there are advanced college placement courses in physics, chemistry, and English, for which college credit is given.

Boston is also one of the most advanced cities in the nation in using electronic data processing for pupil accounting. In the next school year each student in the system will be "on tape," with the standardized test results, report cards, and cumulative records available immediately to administrative staff members from the computer center.

A program involving placement of teaching-interns in the Boston Public Schools has been inaugurated with the co-operation of Harvard University, Boston College, the State College at Boston, and Northeastern University. Added to this program will be several model school projects involving public and parochial schools and medical centers in the Boston area.

Programs in use in the Boston Public Schools have attracted wide recognition among educators. Curriculum guides developed by Boston teachers are in use in many school systems in this country. Teams of teachers from Boston Public Schools have been asked to provide resident assistance in other systems. A team of junior high teachers went to Williamsburg, North Carolina, for assistance in establishing a developmental reading program, and in San Salvador, El Salvador, a group of eight teachers spent three weeks introducing new materials and equipment and presenting lessons in language arts and mathematics as part of a U. S. Department of State School-to-School Project. Three teachers from San Salvador in turn spent two months in Boston working with the Boston team and other teachers.

All of these interrelated activities have contributed to the general improvement of education in the Boston Public Schools, but none could have been really effective without a strong foundation of basic skills. Reading skills in particular deserve special attention because of the high mobility of pupils of the core city. Many families move five or six times during a

school year, and their children often lose more than 25 per cent of a school year. Each move costs an average of 10 school days. The mobility rate, which approaches 100 per cent in some districts, weighs heavily in loss of school time.

In one district, for example, there were 1,223 pupils on September 30, 1963, and 1,105 in June 1964. There had been 572 pupils admitted into the district in the same interim, and 690 discharged, a turnover of 1,262 pupils.

More often than not, 50 per cent of the students of any given class tested in September are located in some other school the following year. The impact of this massive transiency affects not only the school staff but also the children. The long-range educational program is undermined and damaged by this very real factor.

For this reason a standard program of reading instruction for all schools was designed and adopted. While this takes care of movement within the city to some degree, it in no way compensates for the tremendous loss of time caused by frequent moves. Neither does it compensate for the educational gaps that so seriously hamper children entering a large city school system from the rural South.

Challenged by this problem many new programs were reviewed in order to find solutions. Various approaches to the teaching of reading and the implementation of the reading program were studied. It was noted that in recent years large numbers of American schools have changed their reading programs by adding intensive phonetic training at the very beginning of reading instruction. While Boston has alwa[illegible] had a strong phonics

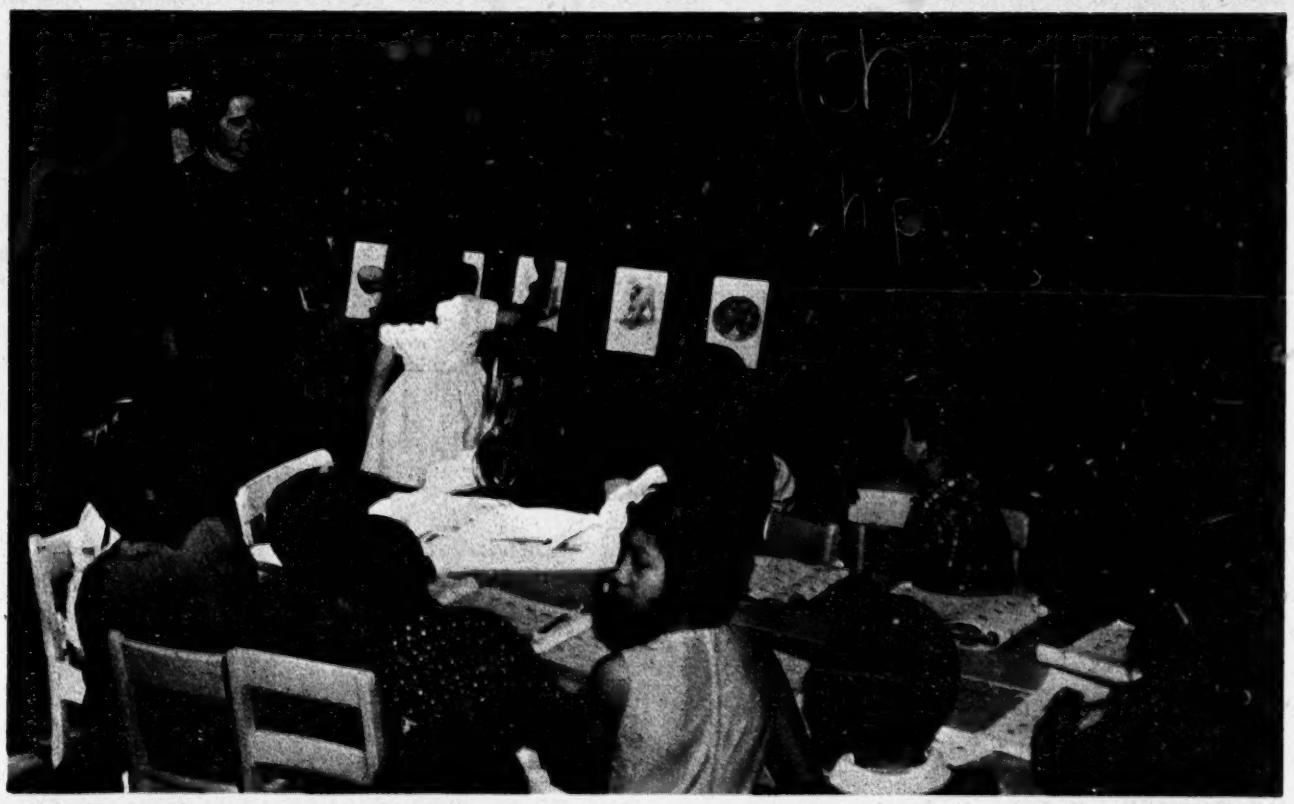
Doris Gorman, teacher of 1962 Grade 1 pilot class, helps Sarah Greenwood pupils with letter sounds.

program, it was decided to employ this technique in the introduction to reading by adopting *Phonetic Keys to Reading.*

Since children are not expendable, it has been a continuing and successful policy of the Boston Public Schools to proceed with caution in introducing change. Before any program is adopted city-wide, it is customary to introduce it on a small scale to a limited number of children. During the past decade, many pilot programs have been started which have resulted in improved instruction. Some of the programs have been designed for all children, others for certain segments of the school population such as the gifted, the average, and the slow learner. A list of these pilot programs is shown in Appendix C.

In September 1962, the *Phonetic Keys to Reading* and *Keys to Independence in Reading* programs were introduced on a pilot basis in one class on each of the first four grade levels. Two of the classes chosen to pilot this program were situated in sections of the city where a heavy concentration of children of limited backgrounds was to be found. Many of these children came from in-migrant families that had come to the city comparatively recently. The other two classes were comprised of children from average American homes whose families have lived in Boston for several generations.

Phonetic Keys to Reading for Grades 1-3 and *Keys to Independence in Reading* for Grades 4-6* are designed to present a balanced program which incorporates a phonetic approach to the teaching of reading. The chief purposes of the material are to develop independence in reading through increased knowledge and func-



Quality of education in the Quincy School, the first graded elementary school in America, built in 1847, is comparable to that offered in the most modern classroom in the city.

*Published by The Economy Company, Indianapolis, Atlanta, Oklahoma City.

tional application of all word perception skills and to improve comprehension and interpretive skills.

Phonetic Keys to Reading approaches the teaching of reading from a standpoint entirely different from that of other basal reading series. The child is given a period of auditory training in hearing vowel and consonant sounds before he learns any sight words for a reading vocabulary. During this initial stage he is taught sounds and letters and is actually given practice in sounding out one-syllable words. Because of this orientation to reading, he is able to apply his newly acquired skills when he is introduced to the reading situation. Silent and oral reading skills are correlated, and all aspects of comprehension are emphasized. *Phonetic Keys to Reading* and *Keys to Independence in Reading* present a complete basal reading program, with instruction in all reading skills, which frees the child from a controlled vocabulary, thus, making him capable of doing wide independent reading.

The account of what actually happened in the 1962-63 Grade 1 pilot class is extremely interesting. In May of 1963, having had the program since September 1962, the children were given the Gates Primary Reading Test, one of the more valid measuring instruments indicating pupil achievement. National norms for the test are derived from a population of children who enter school at or above 6.0 years. In 1962 the entrance age for Boston children was 5.5 years. At this age this difference has real significance. However, the test results were most gratifying. The scores of the April 1963, Grade 1 Word Recognition Test ranged from 2.4 to 3.7 with a median score of 3.6; the Sentence Reading scores ranged from 2.5 to 3.9 with a median score of 3.6; and the Paragraph Reading scores ranged from 2.2 to 4.4 with a median score of 3.8. The average range of scores of the combined tests was from 2.4 to 4.0 with a median score of 3.5. The national norm at the time of testing was 1.7.

The median score of the 1963 pilot class was 3.5 as contrasted to 2.8 for 1966. This difference is particularly noteworthy because only 6 of the original 34 children tested in the pilot class in 1963 were enrolled in the same school in 1966. The high mobility rate discussed in an earlier section of this report is definitely a determining factor in achievement. Although it is obvious that this mobility had the effect of lowering the over-all median scores in the city-wide testing program, no compensating adjustment was possible on scores shown in this report.

The spectacular results of the pilot program convinced the administration of the value of the approach. Therefore, plans were formulated to introduce *Phonetic Keys to Reading* into the seventeen culturally different school districts. Again, the results were so gratifying that it was decided to adopt the program city-wide.

In Boston this program has proved effective in teaching children in special classes, slow learners in the regular classrooms, average children, children in the advanced work classes, and children in the bilingual classes.

All of these interrelated activities have contributed to the general improvement of education of the Boston Public Schools, but none could have been really effective without strong emphasis upon basic skills. It was for this reason that reinforcement of reading skills received such a universal endorsement throughout the school system.

The most recent results of the reading

achievement tests have further increased the general enthusiasm for the program. The following table abstracted from the material in the appendices points to the achievement in Grades 1, 2, and 3. The median score in each grade, both in the culturally different and in the city-wide districts, is above the national norm despite a seven-month handicap because of Boston's 5.5 entrance age.

An analysis of the test scores, both for the seventeen culturally disadvantaged districts and the city-wide school population Grades 1, 2, and 3, is presented in the appendices.

In conclusion, the results of these tests prove that children with impoverished background, high rate of mobility, and low aspirational levels have been taught to read at or above grade levels. The feeling of the Boston school teachers might be expressed in this stanza by Henry van Dyke:

This is my work,
My blessing, not my doom,
Of all who live
I am the one by whom
This work can best be done.

Reading can be taught. Boston does it.

BOSTON PUBLIC SCHOOLS
A STUDY OF GROWTH IN READING ABILITY
GRADES I - II - III
April 1965 and 1966

	17 Culturally Different Districts		City-Wide Districts	
* Grade I				
National Norm April 1.7	1965	1966	1965	1966
Word Recognition	2.3	2.4	2.5	2.6
Sentence Reading	2.2	2.3	2.3	2.4
Paragraph Reading	2.1	2.2	2.3	2.3
Average	2.2	2.3	2.4	2.4
** Grade II				
National Norm April 2.7	1965	1966	1965	1966
Word Recognition	3.3	3.5	3.8	3.9
Paragraph Reading	3.3	3.3	3.5	3.5
Average	3.3	3.4	3.6	3.7
***Grade III				
National Norm April 3.7	1965	1966	1965	1966
Vocabulary	4.2	4.3	4.6	4.7
Rate	3.9	4.0	4.2	4.2
Comprehension	3.9	3.9	4.1	4.1
Average	4.0	4.0	4.3	4.3

* Grade I - Gates Primary Reading Test
** Grade II - Gates Primary Reading Test
***Grade III - Diagnostic Reading Test

Appendices:

APPENDIX (a)

BOSTON PUBLIC SCHOOLS
Boston, Massachusetts

A STUDY OF GROWTH IN READING SKILLS

17 CULTURALLY DIFFERENT DISTRICTS
(COUNTERPOISE DISTRICTS)
SUMMARY REPORT FOR EACH GRADE
ANALYSIS REPORT FOR EACH GRADE
COMPARISON OF APRIL 1965 AND APRIL 1966 - GRADES I, II, III

PHONETIC KEYS TO READING
Introduced into Grade 1 City-Wide - September 1964
Introduced into Grade 2 City-Wide - September 1965
Introduced into Grade 3 City-Wide - September 1965

Entrance Age - Grade I - 5 Years, 5 Months - September 1
School Year Equivalent to 165 Days

MARGUERITE G. SULLIVAN
Deputy Superintendent of Schools (Retired)

BOSTON PUBLIC SCHOOLS
17 CULTURALLY DIFFERENT DISTRICTS
GRADE I — APRIL 1965 AND 1966
GATES PRIMARY READING TEST
National Norm — April — 1.7

SUMMARY — 1965 AND 1966

	Lowest Decile	Lower Quartile	Median	Upper Quartile
WORD RECOGNITION				
1965 Average	1.5	1.9	2.3	2.7
1965 Range	1.3 — 2.1	1.7 — 2.2	2.0 — 2.7	2.4 — 3.4
% Districts at Norm = 1.7	1/17 = 6%	17/17 = 100%	17/17 = 100%	17/17 = 100%
% Districts 1/2 Year Above Norm = 2.2		1/17 = 6%	13/17 = 77%	17/17 = 100%
% Districts 1 Year Above Norm = 2.7				9/17 = 53%
1966 Average	1.6	2.0	2.4	2.8
1966 Range	1.3 — 2.2	1.6 — 2.4	2.0 — 2.9	2.4 — 3.4
% Districts at Norm = 1.7	6/17 = 35%	14/17 = 82%	17/17 = 100%	17/17 = 100%
% Districts 1/2 Year Above Norm = 2.2	1/17 = 6%	5/17 = 29%	15/17 = 88%	17/17 = 100%
% Districts 1 Year Above Norm = 2.7			2/17 = 12%	10/17 = 59%
% Districts 1 1/2 Years Above Norm = 3.2				1/17 = 6%
SENTENCE READING				
1965 Average	1.5	1.8	2.2	2.4
1965 Range	1.4 — 2.1	1.5 — 2.2	1.7 — 2.5	2.2 — 3.1
% Districts at Norm = 1.7	1/17 = 6%	12/17 = 71%	17/17 = 100%	17/17 = 100%
% Districts 1/2 Year Above Norm = 2.2		2/17 = 12%	11/17 = 65%	17/17 = 100%
% Districts 1 Year Above Norm = 2.7				2/17 = 12%
1966 Average	1.6	1.9	2.3	2.5
1966 Range	1.4 — 2.2	1.6 — 2.4	2.0 — 2.6	2.2 — 2.8
% Districts at Norm = 1.7	4/17 = 24%	14/17 = 82%	17/17 = 100%	17/17 = 100%
% Districts 1/2 Year Above Norm = 2.2		4/17 = 24%	13/17 = 77%	17/17 = 100%
% Districts 1 Year Above Norm = 2.7				5/17 = 29%
PARAGRAPH READING				
1965 Average	1.6	1.7	2.1	2.4
1965 Range	1.4 — 1.9	1.6 — 2.2	1.7 — 2.4	2.2 — 2.8
% Districts at Norm = 1.7	2/17 = 12%	12/17 = 71%	17/17 = 100%	17/17 = 100%
% Districts 1/2 Year Above Norm = 2.2		1/17 = 6%	12/17 = 71%	17/17 = 100%
% Districts 1 Year Above Norm = 2.7				1/17 = 6%
1966 Average	1.6	1.9	2.2	2.4
1966 Range	1.5 — 2.2	1.5 — 2.3	1.7 — 2.4	2.2 — 2.9
% Districts at Norm = 1.7	5/17 = 29%	15/17 = 88%	17/17 = 100%	17/17 = 100%
% Districts 1/2 Year Above Norm = 2.2	1/17 = 6%	5/17 = 29%	14/17 = 82%	17/17 = 100%
% Districts 1 Year Above Norm = 3.7				3/17 = 18%

ANALYSIS — 1965

	Lowest Decile 90% Pupils At or Above This Level	Lower Quartile 75% Pupils At or Above This Level	Median 50% Pupils At or Above This Level	Upper Quartile 25% Pupils At or Above This Level
WORD RECOGNITION				
Christopher Gibson	1.5	1.9	2.2	2.7
Dearborn	1.6	2.0	2.3	2.7
Dillaway	1.5	2.0	2.2	2.6
Dudley	1.5	1.7	2.1	2.5
Dwight	1.5	1.9	2.2	2.6
Harvard	1.6	2.1	2.7	3.4
Higginson	1.4	1.7	2.2	2.6
Hugh O'Brien	1.3	1.7	2.2	2.7
Hyde	1.5	1.9	2.2	2.4
Jefferson	1.6	2.1	2.3	2.8
John Winthrop	1.5	1.7	2.0	2.4
Julia Ward Howe	1.3	1.7	2.1	2.6
Norcross	2.1	2.2	2.7	3.1
P.A. Dever	1.4	1.7	2.1	2.4
Phillips Brooks	1.6	1.9	2.2	2.7
Theodore Lyman	1.6	2.1	2.6	2.8
William Endicott	1.5	2.0	2.3	2.7
Average	1.5	1.9	2.3	2.7
Range	1.3 — 2.1	1.7 — 2.2	2.0 — 2.7	2.4 — 3.4
% Districts at Norm = 1.7	1/17 = 6%	17/17 = 100%	17/17 = 100%	17/17 = 100%
% Districts 1/2 Year Above Norm = 2.2		1/17 = 6%	13/17 = 77%	17/17 = 100%
% Districts 1 Year Above Norm = 2.7				9/17 = 53%

SENTENCE READING				
Christopher Gibson	1.5	1.7	2.1	2.3
Dearborn	1.6	2.1	2.3	2.4
Dillaway	1.5	1.7	2.2	2.5
Dudley	1.4	1.5	1.7	2.3
Dwight	1.5	1.7	2.2	2.4
Harvard	1.6	2.2	2.5	3.1
Higginson	1.5	1.6	2.1	2.3
Hugh O'Brien	1.4	1.7	2.1	2.3
Hyde	1.5	2.0	2.2	2.3
Jefferson	1.6	2.0	2.3	2.6
John Winthrop	1.4	1.5	2.0	2.2
Julia Ward Howe	1.4	1.7	2.1	2.3
Norcross	2.1	2.3	2.5	2.7
P. A. Dever	1.4	1.6	2.2	2.4
Phillips Brooks	1.6	1.7	2.2	2.4
Theodore Lyman	1.6	2.1	2.3	2.6
William Endicott	1.5	1.6	2.2	2.5
Average	1.5	1.8	2.2	2.4
Range	1.4 — 2.1	1.5 — 2.2	1.7 — 2.5	2.2 — 3.1
% Districts at Norm = 1.7	1/17 = 6%	12/17 = 71%	17/17 = 100%	17/17 = 100%
% Districts 1/2 Year Above Norm = 2.2		2/17 = 12%	11/17 = 65%	17/17 = 100%
% Districts 1 Year Above Norm = 2.7				2/17 = 12%

ANALYSIS — 1965 (Cont.)

	Lowest Decile 90% Pupils At or Above This Level	Lower Quartile 75% Pupils At or Above This Level	Median 50% Pupils At or Above This Level	Upper Quartile 25% Pupils At or Above This Level
PARAGRAPH READING				
Christopher Gibson	1.6	1.7	2.2	2.4
Dearborn	1.5	1.7	2.2	2.3
Dillaway	1.6	1.7	2.2	2.4
Dudley	1.5	1.6	1.9	2.3
Dwight	1.6	1.7	2.2	2.4
Harvard	1.6	1.7	2.4	2.8
Higginson	1.5	1.6	1.9	2.3
Hugh O'Brien	1.4	1.6	2.1	2.3
Hyde	1.5	1.9	2.2	2.3
Jefferson	1.6	1.7	2.2	2.3
John Winthrop	1.4	1.6	1.7	2.2
Julia Ward Howe	1.5	1.6	1.9	2.3
Norcross	1.9	2.2	2.3	2.6
P. A. Dever	1.6	1.7	2.2	2.3
Phillips Brooks	1.6	1.7	2.2	2.3
Theodore Lyman	1.7	1.9	2.3	2.4
William Endicott	1.5	1.7	2.2	2.4
Average	1.6	1.7	2.1	2.4
Range	1.4 — 1.9	1.6 — 2.2	1.7 — 2.4	2.2 — 2.8
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% Districts 1/2 Year Above Norm = 2.2		1/17 = 6%	12/17 = 71%	17/17 = 100%
% Districts 1 Year Above Norm = 2.7				1/17 = 6%

ANALYSIS — 1966

	Lowest Decile 90% Pupils At or Above This Level	Lower Quartile 75% Pupils At or Above This Level	Median 50% Pupils At or Above This Level	Upper Quartile 25% Pupils At or Above This Level
WORD RECOGNITION				
Christopher Gibson	1.6	2.1	2.4	2.8
Dearborn	1.4	1.7	2.2	2.5
Dillaway	1.6	2.1	2.5	3.1
Dudley	1.7	2.0	2.2	2.6
Dwight	1.5	1.7	2.0	2.4
Harvard	2.1	2.3	2.9	3.4
Higginson	1.5	2.0	2.4	2.9
Hugh O'Brien	1.3	1.6	2.2	2.5
Hyde	1.5	1.8	2.2	2.4
Jefferson	1.8	2.2	2.4	2.8
John Winthrop	1.3	1.6	2.0	2.4
Julia Ward Howe	1.3	1.6	2.2	2.7
Norcross	2.2	2.4	2.8	3.1
P. A. Dever	1.4	1.7	2.2	2.6
Phillips Brooks	1.6	2.0	2.4	2.8
Theodore Lyman	2.1	2.2	2.6	3.1
William Endicott	1.8	2.2	2.5	3.1
Average	1.6	2.0	2.4	2.8
Range	1.3 — 2.2	1.6 — 2.4	2.0 — 2.9	2.4 — 3.4
% Districts at Norm = 1.7	6/17 = 35%	14/17 = 82%	17/17 = 100%	17/17 = 100%
% Districts 1/2 Year Above Norm = 2.2	1/17 = 6%	5/17 = 29%	15/17 = 88%	17/17 = 100%
% Districts 1 Year Above Norm = 2.7			2/17 = 12%	10/17 = 59%
% Districts 1 1/2 Years Above Norm = 3.2				1/17 = 6%

ANALYSIS — 1966 (Cont.)

	Lowest Decile 90% Pupils At or Above This Level	Lower Quartile 75% Pupils At or Above This Level	Median 50% Pupils At or Above This Level	Upper Quartile 25% Pupils At or Above This Level
SENTENCE READING				
Christopher Gibson	1.6	2.1	2.3	2.6
Dearborn	1.5	1.7	2.2	2.4
Dillaway	1.6	2.1	2.4	2.6
Dudley	1.4	1.6	2.1	2.4
Dwight	1.4	1.6	2.0	2.3
Harvard	1.7	2.2	2.5	2.8
Higginson	1.6	2.0	2.2	2.6
Hugh O'Brien	1.4	1.7	2.2	2.4
Hyde	1.4	1.7	2.1	2.2
Jefferson	1.5	1.7	2.3	2.6
John Winthrop	1.5	1.6	2.1	2.2
Julia Ward Howe	1.5	1.7	2.2	2.5
Norcross	2.2	2.4	2.6	2.8
P. A. Dever	1.5	1.7	2.2	2.4
Phillips Brooks	1.5	2.0	2.3	2.7
Theodore Lyman	2.1	2.2	2.5	2.8
William Endicott	1.7	2.2	2.4	2.7
Average	1.6	1.9	2.3	2.5
Range	1.4 — 2.2	1.6 — 2.4	2.0 — 2.6	2.2 — 2.8
% Districts at Norm = 1.7	4/17 = 24%	14/17 = 82%	17/17 = 100%	17/17 = 100%
% Districts 1/2 Year Above Norm = 2.2		4/17 = 24%	13/17 = 77%	17/17 = 100%
% Districts 1 Year Above Norm = 2.7				5/17 = 29%
PARAGRAPH READING				
Christopher Gibson	1.6	1.9	2.2	2.4
Dearborn	1.5	1.7	2.1	2.3
Dillaway	1.7	2.2	2.3	2.5
Dudley	1.5	1.7	2.2	2.4
Dwight	1.6	1.7	2.1	2.3
Harvard	1.7	2.2	2.4	2.9
Higginson	1.6	1.9	2.3	2.5
Hugh O'Brien	1.5	1.7	2.2	2.3
Hyde	[illegible]	1.9	2.2	2.3
Jefferson	1.6	1.9	2.2	2.4
John Winthrop	1.5	1.5	1.7	2.2
Julia Ward Howe	1.5	1.6	2.2	2.4
Norcross	2.2	2.3	2.4	2.7
P. A. Dever	1.6	1.7	2.2	2.3
Phillips Brooks	1.6	1.7	2.3	2.4
Theodore Lyman	1.7	2.2	2.4	2.7
William Endicott	1.7	2.2	2.3	2.6
Average	1.6	1.9	2.2	2.4
Range	1.5 — 2.2	1.5 — 2.3	1.7 — 2.4	2.2 — 2.9
% Districts at Norm = 1.7	5/17 = 29%	15/17 = 88%	17/17 = 100%	17/17 = 100%
% Districts 1/2 Year Above Norm = 2.2	1/17 = 6%	5/17 = 29%	14/17 = 82%	17/17 = 100%
% Districts 1 Year Above Norm = 2.7				3/17 = 18%

BOSTON PUBLIC SCHOOLS
17 CULTURALLY DIFFERENT DISTRICTS
GRADE II — APRIL 1965 AND 1966
GATES PRIMARY READING TEST
National Norm — April — 2.7

SUMMARY — 1965 AND 1966

	Lowest Decile	Lower Quartile	Median	Upper Quartile
WORD RECOGNITION				
1965 Average	2.6	2.8	3.3	4.0
1965 Range	2.1 — 2.9	2.4 — 3.1	2.8 — 4.1	3.1 — 4.9
% Districts at Norm = 2.7	6/17 = 35%	16/17 = 94%	17/17 = 100%	17/17 = 100%
% Districts 1/2 Year Above Norm = 3.2			11/17 = 65%	16/17 = 94%
% Districts 1 Year Above Norm = 3.7			2/17 = 12%	13/17 = 77%
% Districts 1 1/2 Years Above Norm = 4.2				6/17 = 35%
1966 Average	2.6	3.0	3.5	4.1
1966 Range	2.0 — 2.9	2.6 — 3.4	2.8 — 3.9	3.2 — 4.7
% Districts at Norm = 2.7	8/17 = 47%	15/17 = 88%	17/17 = 100%	17/17 = 100%
% Districts 1/2 Year Above Norm = 3.2		4/17 = 24%	13/17 = 77%	17/17 = 100%
% Districts 1 Year Above Norm = 3.7			7/17 = 41%	16/17 = 94%
% Districts 1 1/2 Years Above Norm = 4.2				11/17 = 65%
% Districts 2 Years Above Norm = 4.7				1/17 = 6%
PARAGRAPH READING				
1965 Average	2.5	2.9	3.3	3.8
1965 Range	2.2 — 2.8	2.5 — 3.1	3.1 — 3.5	3.5 — 4.4
% Districts at Norm = 2.7	2/17 = 12%	16/17 = 94%	17/17 = 100%	17/17 = 100%
% Districts 1/2 Year Above Norm = 3.2			12/17 = 71%	17/17 = 100%
% Districts 1 Year Above Norm = 3.7				8/17 = 47%
% Districts 1 1/2 Years Above Norm = 4.2				2/17 = 12%
1966 Average	2.5	2.8	3.3	3.8
1966 Range	2.1 — 3.3	2.4 — 3.6	2.8 — 4.1	3.2 — 4.8
% Districts at Norm = 2.7	5/17 = 29%	14/17 = 82%	17/17 = 100%	17/17 = 100%
% Districts 1/2 Year Above Norm = 3.2	1/17 = 6%	1/17 = 6%	12/17 = 71%	17/17 = 100%
% Districts 1 Year Above Norm = 3.7			1/17 = 6%	8/17 = 47%
% Districts 1 1/2 Years Above Norm = 4.2				3/17 = 18%
% District 2 Years Above Norm = 4.7				1/17 = 6%

ANALYSIS — 1965

	Lowest Decile 90% Pupils At or Above This Level	Lower Quartile 75% Pupils At or Above This Level	Median 50% Pupils At or Above This Level	Upper Quartile 25% Pupils At or Above This Level
WORD RECOGNITION				
Christopher Gibson	2.8	2.9	3.4	4.1
Dearborn	2.6	3.1	4.1	4.9
Dillaway	2.8	2.9	3.5	4.5
Dudley	2.5	2.8	3.2	3.9
Dwight	2.3	2.7	2.9	3.4
Harvard	2.9	3.1	3.7	4.3
Higginson	2.6	2.8	3.2	3.9
Hugh O'Brien	2.2	2.7	3.1	3.8
Hyde	2.1	2.4	2.8	3.1
Jefferson	2.8	2.9	3.5	4.3
John Winthrop	2.6	2.8	3.1	3.6
Julia Ward Howe	2.5	2.8	3.1	3.8
Norcross	2.7	2.9	3.4	4.1
P. A. Dever	2.4	2.8	2.9	3.4
Phillips Brooks	2.5	2.8	3.2	3.7
Theodore Lyman	2.5	2.8	3.5	4.2
William Endicott	2.7	2.9	3.5	4.4
Average	2.6	2.8	3.3	4.0
Range	2.1 — 2.9	2.4 — 3.1	2.8 — 4.1	3.1 — 4.9
% District at Norm = 2.7	6/17 = 35%	16/17 = 94%	17/17 = 100%	17/17 = 100%
% Districts 1/2 Year Above Norm = 3.2			11/17 = 65%	16/17 = 94%
% Districts 1 Year Above Norm = 3.7			2/17 = 12%	13/17 = 77%
% Districts 1 1/2 Years Above Norm = 4.2				6/17 = 35%
PARAGRAPH READING				
Christopher Gibson	2.4	2.8	3.3	3.6
Dearborn	2.6	3.1	3.5	4.1
Dillaway	2.8	3.1	3.4	3.9
Dudley	2.4	2.8	3.2	3.5
Dwight	2.4	2.8	3.3	3.6
Harvard	2.8	3.1	3.4	3.9
Higginson	2.4	2.8	3.3	3.9
Hugh O'Brien	2.4	2.8	3.2	3.6
Hyde	2.2	2.5	3.1	3.5
Jefferson	2.5	2.8	3.3	3.6
John Winthrop	2.4	2.8	3.1	3.5
Julia Ward Howe	2.5	2.9	3.4	3.9
Norcross	2.5	2.9	3.4	4.4
P. A. Dever	2.4	2.8	3.1	3.5
Phillips Brooks	2.4	2.8	3.2	3.9
Theodore Lyman	2.4	2.8	3.4	3.9
William Endicott	2.6	2.9	3.4	4.3
Average	2.5	2.9	3.3	3.8
Range	2.2 — 2.8	2.5 — 3.1	3.1 — 3.5	3.5 — 4.4
% Districts at Norm = 2.7	2/17 = 12%	16/17 = 94%	17/17 = 100%	17/17 = 100%
% Districts 1/2 Year Above Norm = 3.2			12/17 = 71%	17/17 = 100%
% Districts 1 Year Above Norm = 3.7				8/17 = 47%
% Districts 1 1/2 Years Above Norm = 4.2				2/17 = 12%

ANALYSIS — 1966

	Lowest Decile 90% Pupils At or Above This Level	Lower Quartile 75% Pupils At or Above This Level	Median 50% Pupils At or Above This Level	Upper Quartile 25% Pupils At or Above This Level
WORD RECOGNITION				
Christopher Gibson	2.4	2.9	3.5	4.2
Dearborn	2.4	2.8	3.6	4.3
Dillaway	2.8	3.1	3.8	4.3
Dudley	2.4	2.7	3.5	4.3
Dwight	2.3	2.8	3.1	3.8
Harvard	2.9	3.3	3.9	4.7
Higginson	2.8	3.3	3.9	4.3
Hugh O'Brien	2.3	2.8	3.4	4.2
Hyde	2.0	2.6	2.8	3.8
Jefferson	2.8	3.1	3.8	4.2
John Winthrop	2.6	2.8	3.1	3.8
Julia Ward Howe	2.6	2.9	3.4	3.9
Norcross	2.9	3.4	3.9	4.4
P. A. Dever	2.2	2.6	2.8	3.2
Phillips Brooks	2.7	2.9	3.2	4.0
Theodore Lyman	2.8	3.2	3.7	4.2
William Endicott	2.8	3.1	3.8	4.5
Average	2.6	3.0	3.5	4.1
Range	2.0 — 2.9	2.6 — 3.4	2.8 — 3.9	3.2 — 4.7
% Districts at Norm = 2.7	8/17 = 47%	15/17 = 88%	17/17 = 100%	17/17 = 100%
% Districts 1/2 Year Above Norm = 3.2		4/17 = 24%	13/17 = 77%	17/17 = 100%
% Districts 1 Year Above Norm = 3.7			7/17 = 41%	16/17 = 94%
% Districts 1 1/2 Years Above Norm = 4.2				11/17 = 65%
% Districts 2 Years Above Norm = 4.7				1/17 = 6%
PARAGRAPH READING				
Christopher Gibson	2.4	2.8	3.1	3.4
Dearborn	2.4	2.8	3.3	4.1
Dillaway	2.8	2.9	3.4	4.1
Dudley	2.3	2.8	3.2	3.5
Dwight	2.2	2.6	3.1	3.6
Harvard	2.6	2.9	3.4	4.3
Higginson	2.5	2.8	3.3	4.3
Hugh O'Brien	2.4	2.8	3.1	3.5
Hyde	2.1	2.4	2.8	3.2
Jefferson	2.8	2.9	3.4	4.1
John Winthrop	2.4	2.8	3.2	3.5
Julia Ward Howe	2.4	2.8	3.3	3.6
Norcross	3.3	3.6	4.1	4.8
P. A. Dever	2.2	2.5	2.8	3.4
Phillips Brooks	2.4	2.8	3.2	3.6
Theodore Lyman	2.8	3.1	3.5	3.9
William Endicott	2.8	2.8	3.4	4.1
Average	2.5	2.8	3.3	3.8
Range	2.1 — 3.3	2.4 — 3.6	2.8 — 4.1	3.2 — 4.8
% Districts at Norm = 2.7	5/17 = 29%	14/17 = 82%	17/17 = 100%	17/17 = 100%
% Districts 1/2 Year Above Norm = 3.2	1/17 = 6%	1/17 = 6%	12/17 = 71%	17/17 = 100%
% Districts 1 Year Above Norm = 3.7			1/17 = 6%	8/17 = 47%
% Districts 1 1/2 Years Above Norm = 4.2				3/17 = 18%
% Districts 2 Years Above Norm = 4.7				1/17 = 6%

BOSTON PUBLIC SCHOOLS
17 CULTURALLY DIFFERENT DISTRICTS
GRADE III — APRIL 1965 AND 1966
DIAGNOSTIC READING TEST
National Norm — April — 3.7

SUMMARY — 1965 AND 1966

	Lowest Decile	Lower Quartile	Median	Upper Quartile
VOCABULARY				
1965 Average	3.1	3.5	4.2	4.7
1965 Range	2.4 — 3.5	3.0 — 4.0	3.7 — 4.8	4.2 — 5.2
% Districts at Norm = 3.7		7/17 = 41%	17/17 = 100%	17/17 = 100%
% Districts 1/2 Year Above Norm = 4.2			8/17 = 47%	17/17 = 100%
% Districts 1 Year Above Norm = 4.7			2/17 = 12%	12/17 = 71%
% Districts 1 1/2 Years Above Norm = 5.2				1/17 = 6%
1966 Average	3.2	3.7	4.3	4.8
1966 Range	2.6 — 4.5	2.9 — 4.8	3.4 — 5.1	3.9 — 5.4
% Districts at Norm = 3.7	1/17 = 6%	8/17 = 47%	15/17 = 88%	17/17 = 100%
% Districts 1/2 Year Above Norm = 4.2		3/17 = 18%	11/17 = 65%	16/17 = 94%
% Districts 1 Year Above Norm = 4.7		1/17 = 6%	4/17 = 24%	11/17 = 65%
% Districts 1 1/2 Years Above Norm = 5.2				4/17 = 24%

RATE OF READING				
1965 Average	2.2	2.9	3.9	4.5
1965 Range	1.8 — 2.6	2.4 — 3.5	3.7 — 4.3	4.2 — 5.7
% Districts at Norm = 3.7			17/17 = 100%	17/17 = 100%
% Districts 1/2 Year Above Norm = 4.2			1/17 = 6%	17/17 = 100%
% Districts 1 Year Above Norm = 4.7				4/17 = 24%
1966 Average	2.5	3.4	4.0	4.7
1966 Range	1.9 — 3.2	2.4 — 4.1	2.9 — 4.4	4.1 — 5.7
% Districts at Norm = 3.7		6/17 = 35%	15/17 = 88%	17/17 = 100%
% Districts 1/2 Year Above Norm = 4.2			6/17 = 35%	16/17 = 94%
% Districts 1 Year Above Norm = 4.7				10/17 = 59%
% Districts 1 1/2 Years Above Norm = 5.2				1/17 = 6%

SUMMARY — 1965 AND 1966 (Cont.)

	Lowest Decile	Lower Quartile	Median	Upper Quartile
COMPREHENSION				
1965 Average	3.0	3.5	3.9	4.3
1965 Range	2.5 — 3.4	3.0 — 3.9	3.6 — 4.2	4.0 — 4.9
% Districts at Norm = 3.7		5/17 = 29%	16/17 = 94%	17/17 = 100%
% Districts 1/2 Year Above Norm = 4.2			1/17 = 6%	13/17 = 77%
% Districts 1 Year Above Norm = 4.7				1/17 = 6%
1966 Average	3.1	3.6	3.9	4.4
1966 Range	2.4 — 3.8	3.0 — 4.0	3.5 — 4.4	3.8 — 5.3
% Districts at Norm = 3.7	2/17 = 12%	8/17 = 47%	16/17 = 94%	17/17 = 100%
% Districts 1/2 Year Above Norm = 4.2			3/17 = 18%	10/17 = 59%
% Districts 1 Year Above Norm = 4.7				5/17 = 29%

ANALYSIS — 1965

	Lowest Decile 90% Pupils At or Above This Level	Lower Quartile 75% Pupils At or Above This Level	Median 50% Pupils At or Above This Level	Upper Quartile 25% Pupils At or Above This Level
VOCABULARY				
Christopher Gibson	3.1	3.7	4.3	4.9
Dearborn	3.1	3.5	3.9	4.2
Dillaway	3.0	3.5	4.2	4.8
Dudley	2.9	3.2	3.8	4.5
Dwight	2.7	3.1	3.8	4.5
Harvard	3.5	3.9	4.7	5.2
Higginson	3.5	3.9	4.5	4.9
Hugh O'Brien	2.4	3.3	3.9	4.8
Hyde	3.1	3.4	4.0	4.7
Jefferson	3.3	3.8	4.4	4.8
John Winthrop	2.5	3.0	3.7	4.3
Julia Ward Howe	3.1	3.5	4.1	4.8
Norcross	3.5	4.0	4.8	5.1
P. A. Dever	2.8	3.3	3.9	4.6
Phillips Brooks	3.0	3.3	4.0	4.8
Theodore Lyman	3.1	3.7	4.5	4.8
William Endicott	3.3	3.7	4.5	4.9
Average	3.1	3.5	4.2	4.7
Range	2.4 — 3.5	3.0 — 4.0	3.7 — 4.8	4.2 — 5.2
% Districts at Norm = 3.7		7/17 = 41%	17/17 = 100%	17/17 = 100%
% Districts 1/2 Year Above Norm = 4.2			8/17 = 47%	17/17 = 100%
% Districts 1 Year Above Norm = 4.7			2/17 = 12%	12/17 = 71%
% Districts 1 1/2 Years Above Norm = 5.2				1/17 = 6%

ANALYSIS — 1965 (Cont.)

	Lowest Decile 90% Pupils At or Above This Level	Lower Quartile 75% Pupils At or Above This Level	Median 50% Pupils At or Above This Level	Upper Quartile 25% Pupils At or Above This Level
RATE OF READING				
Christopher Gibson	2.4	3.2	4.0	4.7
Dearborn	2.4	2.8	3.7	4.2
Dillaway	2.4	2.8	4.0	4.5
Dudley	2.2	2.8	3.7	4.2
Dwight	1.9	2.8	4.0	4.3
Harvard	2.2	3.2	4.0	4.6
Higginson	1.8	2.4	3.7	4.3
Hugh O'Brien	2.0	2.6	4.0	4.3
Hyde	2.5	3.2	4.0	4.3
Jefferson	2.6	3.2	4.0	4.4
John Winthrop	2.0	2.4	3.7	4.9
Julia Ward Howe	2.4	2.9	4.0	4.4
Norcross	2.6	3.5	4.1	4.9
P. A. Dever	2.0	2.8	4.0	4.4
Phillips Brooks	2.0	2.6	3.9	4.4
Theodore Lyman	2.2	2.6	3.7	4.2
William Endicott	2.4	3.5	4.3	5.7
Average	2.2	2.9	3.9	4.5
Range	1.8 — 2.6	2.4 — 3.5	3.7 — 4.3	4.2 — 5.7
% Districts at Norm = 3.7			17/17 = 100%	17/17 = 100%
% Districts 1/2 Year Above Norm = 4.2			1/17 = 6%	17/17 = 100%
% Districts 1 Year Above Norm = 4.7				4/17 = 24%

COMPREHENSION				
Christopher Gibson	3.1	3.7	4.0	4.7
Dearborn	3.2	3.5	3.8	4.0
Dillaway	3.3	3.6	3.9	4.5
Dudley	2.9	3.4	3.8	4.2
Dwight	2.5	3.2	3.6	4.0
Harvard	3.4	3.9	4.2	4.9
Higginson	3.2	3.7	3.9	4.3
Hugh O'Brien	2.5	3.2	3.7	4.2
Hyde	3.1	3.5	3.9	4.3
Jefferson	3.4	3.7	4.0	4.4
John Winthrop	2.5	3.0	3.7	4.0
Julia Ward Howe	3.1	3.5	4.0	4.4
Norcross	3.3	3.6	4.0	4.5
P. A. Dever	2.6	3.2	3.8	4.2
Phillips Brooks	2.8	3.4	3.8	4.1
Theodore Lyman	3.1	3.6	3.9	4.3
William Endicott	3.2	3.7	4.0	4.4
Average	3.0	3.5	3.9	4.3
Range	2.5 — 3.4	3.0 — 3.9	3.6 — 4.2	4.0 — 4.9
% Districts at Norm = 3.7		5/17 = 29%	16/17 = 94%	17/17 = 100%
% Districts 1/2 Year Above Norm = 4.2			1/17 = 6%	13/17 = 77%
% Districts 1 Year Above Norm = 4.7				1/17 = 6%

ANALYSIS — 1966

	Lowest Decile 90% Pupils At or Above This Level	Lower Quartile 75% Pupils At or Above This Level	Median 50% Pupils At or Above This Level	Upper Quartile 25% Pupils At or Above This Level
VOCABULARY				
Christopher Gibson	3.4	3.9	4.5	4.9
Dearborn	2.9	3.5	4.1	4.6
Dillaway	3.4	3.7	4.3	4.9
Dudley	2.8	3.3	3.8	4.6
Dwight	2.8	3.1	3.5	4.3
Harvard	3.8	4.2	4.8	5.2
Higginson	3.5	3.9	4.5	4.9
Hugh O'Brien	2.9	3.5	4.4	5.1
Hyde	2.6	2.9	3.4	3.9
Jefferson	3.1	3.5	4.3	4.8
John Winthrop	3.0	3.4	4.0	4.5
Julia Ward Howe	3.5	4.0	4.8	5.2
Norcross	4.5	4.8	5.1	5.4
P. A. Dever	2.9	3.3	3.9	4.6
Phillips Brooks	3.2	3.8	4.6	5.0
Theodore Lyman	3.4	4.2	4.8	5.2
William Endicott	2.9	3.5	4.3	4.8
Average	3.2	3.7	4.3	4.8
Range	2.6 — 4.5	2.9 — 4.8	3.4 — 5.1	3.9 — 5.4
% Districts at Norm = 3.7	1/17 = 6%	8/17 = 47%	15/17 = 88%	17/17 = 100%
% Districts 1/2 Year Above Norm = 4.2		3/17 = 18%	11/17 = 65%	16/17 = 94%
% Districts 1 Year Above Norm = 4.7		1/17 = 6%	4/17 = 24%	11/17 = 65%
% Districts 1 1/2 Years Above Norm = 5.2				4/17 = 24%

RATE OF READING				
Christopher Gibson	2.2	3.7	4.0	4.9
Dearborn	2.4	3.2	4.0	4.3
Dillaway	2.9	3.7	4.1	4.9
Dudley	2.8	3.5	4.2	4.7
Dwight	2.0	2.6	3.5	4.1
Harvard	2.6	3.5	4.1	4.4
Higginson	2.9	4.0	4.4	5.4
Hugh O'Brien	2.2	2.9	4.0	4.5
Hyde	1.9	2.4	2.9	4.2
Jefferson	2.0	2.8	3.7	4.2
John Winthrop	2.6	3.5	4.1	5.1
Julia Ward Howe	2.6	3.5	4.1	4.7
Norcross	3.2	4.1	4.4	5.7
P. A. Dever	2.0	2.8	3.7	4.2
Phillips Brooks	2.4	3.5	4.2	4.7
Theodore Lyman	2.6	3.7	4.3	4.9
William Endicott	2.4	3.7	4.2	5.1
Average	2.5	3.4	4.0	4.7
Range	1.9 — 3.2	2.4 — 4.1	2.9 — 4.4	4.1 — 5.7
% Districts at Norm = 3.7		6/17 = 35%	15/17 = 88%	17/17 = 100%
% Districts 1/2 Year Above Norm = 4.2			6/17 = 35%	16/17 = 94%
% Districts 1 Year Above Norm = 4.7				10/17 = 59%
% Districts 1 1/2 Year Above Norm = 5.2				1/17 = 6%

ANALYSIS — 1966 (Cont.)

	Lowest Decile 90% Pupils At or Above This Level	Lower Quartile 75% Pupils At or Above This Level	Median 50% Pupils At or Above This Level	Upper Quartile 25% Pupils At or Above This Level
COMPREHENSION				
Christopher Gibson	3.4	3.8	4.1	4.9
Dearborn	3.0	3.5	3.8	4.0
Dillaway	3.4	3.8	4.1	4.7
Dudley	2.6	3.3	3.8	4.1
Dwight	2.6	3.3	3.7	3.9
Harvard	3.5	3.8	4.3	4.9
Higginson	3.5	3.8	4.0	4.5
Hugh O'Brien	2.9	3.5	3.9	4.4
Hyde	2.4	3.0	3.5	3.8
Jefferson	2.9	3.4	3.8	4.1
John Winthrop	2.8	3.4	3.7	3.9
Julia Ward Howe	3.4	3.8	4.2	4.9
Norcross	3.8	3.9	4.1	4.4
P. A. Dever	2.6	3.3	3.7	4.0
Phillips Brooks	3.4	3.7	4.0	4.4
Theodore Lyman	3.7	4.0	4.4	5.3
William Endicott	3.0	3.6	3.9	4.2
Average	3.1	3.6	3.9	4.4
Range	2.4 — 3.8	3.0 — 4.0	3.5 — 4.4	3.8 — 5.3
% Districts at Norm = 3.7	2/17 = 12%	8/17 = 47%	16/17 = 94%	17/17 = 100%
% Districts at 1/2 Year Above Norm = 4.2			3/17 = 18%	10/17 = 59%
% Districts at 1 Year Above Norm = 4.7				5/17 = 29%

APPENDIX (b)

BOSTON PUBLIC SCHOOLS
Boston, Massachusetts

CITY-WIDE READING ACHIEVEMENT

Comparison of April 1965 and April 1966 — Grades I, II, III

56 Districts — April 1965
57 Districts — April 1966

SUMMARY REPORT FOR EACH GRADE
ANALYSIS REPORT FOR EACH GRADE

PHONETIC KEYS TO READING
Introduced into Grade 1 City-Wide - September 1964
Introduced into Grade 2 City-Wide - September 1965
Introduced into Grade 3 City-Wide - September 1965

Entrance Age - Grade I - 5 Years, 5 Months - September 1

School Year Equivalent to 165 Days

MARGUERITE G. SULLIVAN
Deputy Superintendent of Schools (Retired)

BOSTON PUBLIC SCHOOLS
READING ACHIEVEMENT
APRIL 1965 AND 1966
GRADE I
CITY-WIDE READING ACHIEVEMENT
GATES PRIMARY READING TEST
FORM III
National Norm — April — 1.7

SUMMARY — 1965 AND 1966

	Lowest Decile	Lower Quartile	Median	Upper Quartile
WORD RECOGNITION				
1965 Average	1.6	2.1	2.5	2.9
1965 Range	1.3 — 2.6	1.7 — 2.9	2.0 — 3.3	2.3 — 3.6
1966 Average	1.6	2.2	2.6	3.1
1966 Range	1.3 — 2.2	1.6 — 2.7	2.0 — 3.1	2.4 — 3.5
SENTENCE READING				
1965 Average	1.6	2.0	2.3	2.6
1965 Range	1.4 — 2.5	1.5 — 2.7	1.7 — 3.2	2.2 — 3.8
1966 Average	1.6	2.1	2.4	2.8
1966 Range	1.3 — 2.2	1.6 — 2.5	2.1 — 2.9	2.2 — 3.6
PARAGRAPH READING				
1965 Average	1.6	1.9	2.3	2.5
1965 Range	1.5 — 2.3	1.6 — 2.6	1.7 — 2.9	2.2 — 3.8
1966 Average	1.6	2.1	2.3	2.7
1966 Range	1.4 — 2.3	1.5 — 2.4	1.7 — 2.7	2.2 — 3.2

ANALYSIS — 1965 AND 1966
Lowest Decile and Lower Quartile

	Lowest Decile # Districts 90% Pupils At or Above 1.7 = Norm	Lowest Decile # Districts 90% Pupils At or Above 2.2 = 1/2 Yr. Above Norm	Lower Quartile # Districts 75% Pupils At or Above 1.7 = Norm	Lower Quartile # Districts 75% Pupils At or Above 2.2 = 1/2 Yr. Above Norm	Lower Quartile # Districts 75% Pupils At or Above 2.7 = 1 Yr. Above Norm
WORD RECOGNITION					
1965	30/56	3/56	56/56	22/56	1/56
% of City	54%	5%	100%	39%	2%
1966	33/57	7/57	54/57	33/57	1/57
% of City	58%	12%	95%	58%	2%
SENTENCE READING					
1965	17/56	1/56	45/56	18/56	1/56
% of City	30%	2%	80%	32%	2%
1966	27/57	3/57	53/57	28/57	0/57
% of City	47%	5%	93%	49%	0%
PARAGRAPH READING					
1965	21/56	1/56	46/56	16/56	0/56
% of City	38%	2%	82%	29%	0%
1966	26/57	5/57	54/57	27/57	0/57
% of City	46%	9%	95%	47%	0%

ANALYSIS — 1965 AND 1966
MEDIAN

	# Districts 50% Pupils At or Above 1.7 = Norm	Median # Districts 50% Pupils At or Above 2.2 = 1/2 Yr. Above Norm	# Districts 50% Pupils At or Above 2.7 = 1 Yr. Above Norm	# Districts 50% Pupils At or Above 3.2 = 1 1/2 Yrs. Above Norm
WORD RECOGNITION				
1965	56/56	51/56	18/56	1/56
% of City	100%	91%	32%	2%
1966	57/57	54/57	25/57	0/57
% of City	100%	95%	44%	0%
SENTENCE READING				
1965	56/56	48/56	1/56	0/56
% of City	100%	86%	2%	0%
1966	57/57	52/57	8/57	0/57
% of City	100%	91%	14%	0%
PARAGRAPH READING				
1965	56/56	47/56	1/56	0/56
% of City	100%	84%	2%	0%
1966	57/57	53/57	2/57	0/57
% of City	100%	93%	4%	0%

ANALYSIS — 1965 AND 1966
UPPER QUARTILE

	Upper Quartile # Districts 25% Pupils At or Above 2.2 = 1/2 Yr. Above Norm	# Districts 25% Pupils At or Above 2.7 = 1 Yr. Above Norm	# Districts 25% Pupils At or Above 3.2 = 1 1/2 Yrs. Above Norm
WORD RECOGNITION			
1965	56/56	46/56	15/56
% of City	100%	82%	27%
1966	57/57	49/57	26/57
% of City	100%	86%	46%
SENTENCE READING			
1965	56/56	30/56	1/56
% of City	100%	54%	2%
1966	57/57	38/57	6/57
% of City	100%	67%	11%
PARAGRAPH READING			
1965	56/56	9/56	1/56
% of City	100%	16%	2%
1966	57/57	25/57	1/57
% of City	100%	44%	2%

BOSTON PUBLIC SCHOOLS
READING ACHIEVEMENT
APRIL 1965 AND 1966
GRADE II
CITY-WIDE READING ACHIEVEMENT
GATES PRIMARY READING TEST
1965 — FORM I 1966 — FORM II
National Norm — April — 2.7

SUMMARY — 1965 AND 1966

	Lowest Decile	Lower Quartile	Median	Upper Quartile
WORD RECOGNITION				
1965 Average	2.8	3.1	3.8	4.5
1965 Range	2.1 — 3.7	2.4 — 4.3	2.8 — 4.9	3.1 — 5.2
1966 Average	2.8	3.1	3.9	4.6
1966 Range	2.0 — 3.7	2.6 — 4.2	2.8 — 4.9	3.2 — 5.2
PARAGRAPH READING				
1965 Average	2.8	3.1	3.5	4.4
1965 Range	2.2 — 3.4	2.5 — 4.1	3.1 — 4.9	3.3 — 5.6
1966 Average	2.6	2.9	3.5	4.3
1966 Range	2.1 — 3.4	2.4 — 3.6	2.8 — 4.4	3.2 — 5.2

ANALYSIS — 1965 AND 1966
Lowest Decile and Lower Quartile

	Lowest Decile		Lower Quartile		
	# Districts 90% Pupils At or Above 2.7 = Norm	# Districts 90% Pupils At or Above 3.2 = 1/2 Yr. Above Norm	# Districts 75% Pupils At or Above 2.7 = Norm	# Districts 75% Pupils At or Above 3.2 = 1/2 Yr. Above Norm	# Districts 75% Pupils At or Above 3.7 = 1 Yr. Above Norm
WORD RECOGNITION					
1965	40/56	2/56	55/56	25/56	7/56
% of City	71%	4%	98%	45%	13%
1966	45/57	7/57	54/57	30/57	13/57
% of City	79%	12%	95%	53%	23%
PARAGRAPH READING					
1965	32/56	7/56	55/56	24/56	2/56
% of City	58%	13%	98%	43%	4%
1966	32/57	3/57	53/57	24/57	0/57
% of City	56%	5%	93%	42%	0%

ANALYSIS — 1965 AND 1966
MEDIAN

	Median			
	# Districts 50% Pupils At or Above 2.7 = Norm	# Districts 50% Pupils At or Above 3.2 = 1/2 Yr. Above Norm	# Districts 50% Pupils At or Above 3.7 = 1 Yr. Above Norm	# Districts 50% Pupils At or Above 4.2 = 1 1/2 Yrs. Above Norm
WORD RECOGNITION				
1965	56/56	48/56	34/56	13/56
% of City	100%	86%	61%	23%
1966	57/57	52/57	44/57	17/57
% of City	100%	91%	77%	30%
PARAGRAPH READING				
1965	56/56	52/56	21/56	10/56
% of City	100%	93%	38%	18%
1966	57/57	51/57	19/57	7/57
% of City	100%	90%	33%	12%

ANALYSIS — 1965 AND 1966
UPPER QUARTILE

	Upper Quartile			
	# Districts 25% Pupils At or Above 3.2 = 1/2 Yr. Above Norm	# Districts 25% Pupils At or Above 3.7 = 1 Yr. Above Norm	# Districts 25% Pupils At or Above 4.2 = 1 1/2 Yrs. Above Norm	# Districts 25% Pupils At or Above 4.7 = 2 Yrs. Above Norm
WORD RECOGNITION				
1965	55/56	52/56	38/56	16/56
% of City	98%	93%	68%	29%
1966	57/57	56/57	48/57	16/57
% of City	100%	98%	84%	28%
PARAGRAPH READING				
1965	56/56	46/56	30/56	14/56
% of City	100%	82%	54%	25%
1966	57/57	45/57	32/57	12/57
% of City	100%	79%	56%	21%

BOSTON PUBLIC SCHOOLS
READING ACHIEVEMENT
APRIL 1965 AND 1966
GRADE III
CITY-WIDE READING ACHIEVEMENT
DIAGNOSTIC READING TEST
FORM B
National Norm — April — 3.7

SUMMARY — 1965 AND 1966

	Lowest Decile	Lower Quartile	Median	Upper Quartile
VOCABULARY				
1965 Average	3.3	3.9	4.6	5.1
1965 Range	2.4 — 4.4	3.0 — 4.9	3.7 — 5.1	4.3 — 5.3
1966 Average	3.4	4.0	4.7	5.1
1966 Range	2.6 — 4.5	2.9 — 4.8	3.4 — 5.2	3.9 — 5.4
RATE OF READING				
1965 Average	2.6	3.5	4.2	4.9
1965 Range	1.8 — 3.8	2.4 — 4.2	3.7 — 4.9	4.2 — 5.7
1966 Average	2.6	3.5	4.2	4.9
1966 Range	1.9 — 3.5	2.6 — 4.2	2.9 — 4.7	4.2 — 5.7
COMPREHENSION				
1965 Average	3.3	3.8	4.1	4.7
1965 Range	2.5 — 4.0	3.0 — 4.2	3.6 — 4.5	4.0 — 5.6
1966 Average	3.4	3.8	4.1	4.7
1966 Range	2.4 — 3.9	3.0 — 4.2	3.5 — 4.9	3.8 — 5.5

ANALYSIS — 1965 AND 1966
Lowest Decile and Lower Quartile

	Lowest Decile		Lower Quartile		
	# Districts 90% Pupils At or Above 3.7 = Norm	# Districts 90% Pupils At or Above 4.2 = 1/2 Yr. Above Norm	# Districts 75% Pupils At or Above 3.7 = Norm	# Districts 75% Pupils At or Above 4.2 = 1/2 Yr. Above Norm	# Districts 75% Pupils At or Above 4.7 = 1 Yr. Above Norm
VOCABULARY					
1965	16/56	3/56	41/56	20/56	3/56
% of City	29%	5%	73%	36%	5%
1966	20/57	3/57	45/57	26/57	3/57
% of City	35%	5%	79%	46%	5%
RATE OF READING					
1965	2/56	0/56	21/56	4/56	0/56
% of City	4%	0%	38%	7%	0%
1966	1/57	0/57	29/57	1/57	0/57
% of City	2%	0%	51%	2%	0%
COMPREHENSION					
1965	17/56	0/56	40/56	1/56	0/56
% of City	30%	0%	71%	2%	0%
1966	17/57	0/57	43/57	3/57	0/57
% of City	30%	0%	.75%	5%	0%

ANALYSIS — 1965 AND 1966
MEDIAN

	Median			
	# Districts 50% Pupils At or Above 3.7 = Norm	# Districts 50% Pupils At or Above 4.2 = 1/2 Yr. Above Norm	# Districts 50% Pupils At or Above 4.7 = 1 Yr. Above Norm	# Districts 50% Pupils At or Above 5.2 = 1 1/2 Yrs. Above Norm
VOCABULARY				
1965	56/56	46/56	30/56	0/56
% of City	100%	82%	54%	0%
1966	56/57	50/57	33/57	1/57
% of City	98%	88%	58%	2%
RATE OF READING				
1965	56/56	25/56	2/56	0/56
% of City	100%	45%	4%	0%
1966	55/57	36/57	1/57	0/57
% of City	97%	63%	2%	0%
COMPREHENSION				
1965	56/56	25/56	1/56	0/56
% of City	100%	45%	2%	0%
1966	56/57	23/57	4/57	0/57
% of City	98%	40%	7%	0%

ANALYSIS — 1965 AND 1966
UPPER QUARTILE

	Upper Quartile		
	# Districts 25% of Pupils At or Over 4.2 = 1/2 Yr. Above Norm	# Districts 25% of Pupils At or Over 4.7 = 1 Yr. Above Norm	# Districts 25% of Pupils At or Over 5.2 = 1 1/2 Yrs. Above Norm
VOCABULARY			
1965	56/56	49/56	16/56
% of City	100%	88%	29%
1966	57/57	51/57	17/57
% of City	100%	90%	30%
RATE OF READING			
1965	56/56	29/56	18/56
% of City	100%	52%	32%
1966	56/57	34/57	21/57
% of City	98%	60%	37%
COMPREHENSION			
1965	52/56	29/56	4/56
% of City	93%	52%	7%
1966	49/57	28/57	4/57
% of City	86%	49%	7%

APPENDIX (c)

During the past decade, pilot programs were designed to meet the many problems the schools were facing. The following list of pilot programs, now permanent, undertaken by the Boston Public Schools gives some indication of the scope and magnitude of the changes effected in recent years. These have since been incorporated into the Boston Public Schools. Because the school has a commitment to all children, pilot programs have been directed toward the gifted, the average, and the slow learner as well as toward the child who has special interests and/or talents.

READING

1930 First Remedial Reading Clinic in the U. S. — City of Boston Teachers College

1956 Introduced Reading as a separate subject in Grades 7 and 8

1958 Developmental Reading—Junior High

1962 Phonetic Keys to Reading—Elementary

1964 Developmental Reading—Elementary

1965 Language Arts-Reading Program Grade 1—Little Owl Series

1966 Programed Reading—Elementary

1966 Teaching Reading as a Second Language—to non-English-speaking children

FOREIGN LANGUAGES IN ELEMENTARY SCHOOLS

1960 French

1964 English to Spanish-speaking children

SPECIAL SERVICES AND PROGRAMS

1959 Advanced Work Classes for accelerated students—Elementary

1961 Advanced Work Classes for Junior High

1963 Guidance in Junior High School

1964 Guidance in one Elementary School

1943 Pupil Adjustment Counselling—one director; two Counsellors

1966 One Director; one Assistant Director—one Research Assistant; 29 Counsellors

1962 Operation Second Chance-a program designed for 14-year-old potential dropouts

1966 Work-Study—extension of Operation Second Chance

EARLY CHILDHOOD EDUCATION

1964 Pre-Kindergarten—four classes

1966 City-Wide Adoption—Kindergarten I — four-year-old children
Kindergarten II — five-year-old children

MODERN MATHEMATICS

1961 Programs in Junior High

1962 Various programs in the Modern Mathematics piloted in different elementary schools

1963 City-Wide Adoption

SUMMER PROGRAMS

1963 Four Reading Laboratories—Junior and Senior High School

1964 Four Reading and Mathematics Laboratories—Elementary School

1965 17 Reading and Mathematics Laboratories—Elementary School

AFTER SCHOOL PROGRAMS

1960 Books Exposure Program sponsored by Phillips Brooks House, Harvard University

1963 Three Reading Laboratories and one Mathematics Laboratory—Elementary School

1964 17 Reading and Mathematics Laboratories—Elementary School

COUNTERPOISE

1963 Counterpoise—a program designed to assist culturally different children

Emphasis on Reading and Mathematics—Junior Grades 1-4.

Step toward non-graded structure

Team Teaching

Use of multi-sensory and programed materials

Field trips and assemblies

Increased parental and community involvement

OFFICE OF PROGRAM DEVELOPMENT

1965 Establishment of the Office of Program Development—one Consulting Director; one Administrative Co-ordinator; one Program Analyst; and one Education Specialist

The elementary section of the Developmental School Program was initiated

1966 Early Childhood, Junior and Senior High Programs were initiated

1966 The programs to be developed under Title II of the Elementary and Secondary Education Act were approved

DEPARTMENT OF COMPENSATORY SERVICES

1965 Establishment of the Department of Compensatory Services—one Director servicing 12 school districts

1966 Expansion to 38 schools in 17 school districts—three Assistant Directors; two Supervisors from the Department of Elementary Supervision; and two Supervisors from the Department of Teacher Placement

1966 Initiated the program in Junior and Senior High School and continued the program in the 17 elementary school districts